Science
Curriculum Intent

Curriculum Objectives

What does it mean to study Science at Humphry Davy School?

To have a knowledge and understanding of the World around you in relation to Biology, Chemistry and Physics. Relevance to the "real world" underpinning everything that we learn. Understanding global issues that we all face. Questioning evidence that is presented to you and understanding bias and agendas. Developing practical skills and problem solving skills. Asking questions and testing theorems.

Curriculum Intent

What we want students at the end of year 8 to know

A knowledge and understanding of the10 core topics of Biology, Chemistry and Physics; Forces, Electromagnets, Energy, Waves, Matter, Reactions, Earth, Organisms, Ecosystem, Genes. These are from the National Curriculum that link into the 5 year spiral curriculum from AQA and act as building blocks To have developed the fundamental English and Math skills required to access the topics. To have a higher level of practical competency through learning by 'doing' whilst building resilience

What we want students at the end of year 11 to know

How science impacts the world around us and its relevance and importance to the future of the planet including their place in the natural environment. Being able to question news and data enabling them to draw their own conclusions. Their skills and knowledge are developed through the AQA curriculum and delivered through lessons. How to live a healthy and responsible life. A broad understanding of the exciting vocational opportunities available for their future careers

How British Values, PSHE and Careers are promoted your subjects curriculum

PSHE subjects are taught in the curriculum such as relationships within Reproduction, healthy living through communicable and non-communicable diseases, health & Lifestyle topics (smoking, alcohol and drugs), ethics of genetic engineering including GM crops, IVF and Stem Cell research, exploring the Big Bang Theory as a scientific theory as opposed to a religious belief in Physics. British Values of Rule of Law, Democracy, Mutual Respect, Tolerance of different cultures and religions and Individual Liberty are included through discussions. By addressing prejudice, ignorance and intolerance by creating a safe and secure classroom environment enabling a relationship of trust and respect between students and teacher. Inviting outside involvement from STEM Ambassadors, Penwith

College lecturers and other speakers during Science Week. Drop down days with the RAF, Army and Navy covering engineering related careers
Trips, competitions and visits enriching curriculum content including Salters, Lego Engineering, Faraday Challenges, Geothermal visits